

**CLAIMS:**

1. An apparatus for storing aquatic animals, comprising a tank for receipt of the aquatic animals, and an arrangement to create a foam environment in the interior of the tank and configured such that at least a majority of the aquatic animals when stored in the tank are submerged in foam.
2. An apparatus as claimed in claim 1, wherein the arrangement configured to create a foam environment in the interior of the tank is configured to deliver a foam to the interior of the tank.
3. An apparatus as claimed in claim 2, wherein the arrangement to create a foam environment in the interior of the tank comprises a device configured to apply foam over at least a majority of the aquatic animals when stored in the tank.
4. An apparatus as claimed in any one of claims 2 to 3, wherein the arrangement to create a foam environment in the interior of the tank is configured to deliver a synthetic foam to the interior of the tank.
5. An apparatus as claimed in any one of claims 1 to 4, wherein the arrangement to create a foam environment in the interior of the tank is configured to generate foam.
6. An apparatus as claimed in claim 5, wherein the arrangement to create a foam environment in the interior of the tank comprises a fluid recirculation arrangement which is configured to recirculate fluid from a lower region of the interior of the tank in which the aquatic animals are to be stored to a higher region of the interior of the tank, such that the fluid passes over at least a majority of the aquatic animals when stored in the tank and the natural proteins of the aquatic animals create a foam as the fluid is recirculated.

7. An apparatus as claimed in claim 5 or 6, wherein the arrangement to create a foam environment in the interior of the tank is additionally configured to introduce one or more property-enhancing substances into the fluid or foam.
- 5 8. An apparatus as claimed in any one of claims 5 to 7, wherein the arrangement to create a foam environment in the interior of the tank is configured to introduce pressurised gas into the fluid to enhance foam generation.
9. An apparatus as claimed in claim 8, wherein the arrangement to create a foam environment in the interior of the tank comprises a fluid pathway extending from a lower region of the tank to a higher region of the tank, and additionally comprises an arrangement to introduce pressurised gas into the fluid pathway which generates a vacuum to suck fluid from the lower region of the tank and deliver fluid to the higher region of the tank via the fluid pathway, to apply the fluid as a foam over at least a majority of the aquatic animals when stored in the tank.
- 10 15 10. An apparatus as claimed in claim 9, configured to introduce pressurised gas in pulses, so that the foam is applied over the aquatic animals in pulses.
11. An apparatus as claimed in any one of claims 8 to 10, wherein the gas is refrigerated or humidified.
12. An apparatus as claimed in any one of claims 8 to 11, configured to introduce at least one property-enhancing substance with the gas.
- 25 13. An apparatus as claimed in any one of claims 8 to 12, wherein the gas is air.
14. An apparatus for storing aquatic animals, comprising a tank for receipt of the aquatic animals, and a fluid recirculation arrangement which is configured to recirculate fluid from a lower region of the interior of the tank in which the aquatic animals are stored to a higher region of the interior of the tank, such that the fluid passes over at least a majority of the aquatic animals when stored in the tank and the natural proteins
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of the aquatic animals create a foam as the fluid is recirculated, such that at least a majority of the aquatic animals when stored in the tank are submerged in foam.

15      15.      An apparatus as claimed in any one of claims 1 to 14, when used to store aquatic animals.

16.      A method of storing aquatic animals, comprising providing an apparatus as claimed in any one of claims 1 to 14, loading the aquatic animals into the interior of the tank, and creating a foam environment in the interior of the tank such that at least a majority of the aquatic animals in the tank are submerged in foam.

17.      A method as claimed in claim 16, comprising packing the aquatic animals relatively tightly in the interior of the tank to form a packed bed, so that the foam moves slowly around the aquatic animals in the tank.

18.      A method as claimed in claim 16 or 17, wherein the method comprises using the apparatus to generate foam from the natural proteins of the aquatic animals.

19.      A method as claimed in claim 18, comprising recirculating fluid from a lower region of the interior of the tank to a higher region of the interior of the tank and over at least a majority of the aquatic animals in the tank to generate foam from the natural proteins of the aquatic animals.

20.      A method as claimed in claim 19, comprising mixing pressurised gas with the fluid to enhance foam generation.

21.      A method as claimed in claim 19, comprising introducing the pressurised gas in pulses, so that the foam is recirculated back into the higher region of the tank and over the aquatic animals in pulses.

22.      A method as claimed in claim 20 or 21, wherein the gas is refrigerated or humidified.

23. A method as claimed in any one of claims 20 to 22, comprising introducing at least one property-enhancing substance with the gas.

24. A method as claimed in any one of claims 20 to 23, wherein the gas is air.

25. A method as claimed in any one of claims 16 to 24, wherein the aquatic animals are shellfish.

26. A method as claimed in claim 25, wherein the aquatic animals are mussels.